

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
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Complete if Known

Application Number	To be assigned
Filing Date	July 31, 2003
First Named Inventor	Hilda E. Smith
Group Art Unit	To be assigned 1645
Examiner Name	To be assigned J. Hines
Attorney Docket Number	2183-6055US

Sheet 1 of 3

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
A		US-5,610,011	03/11/1997	Smith et al.	
		US- 5,681,570	10/28/1997	Yang et al.	
		US- 5,733,765	03/31/1998	Mollet et al.	
		US- 5,786,184	07/28/1998	Mollet et al.	
		US- 5,928,900	07/27/1999	Masure et al.	
		US- 5,948,900	09/07/1999	Yother et al.	
		US- 5,981,228	11/09/1999	Masure et al.	
		US- 2002/0055168 A1	05-09-2002	Smith	
		US-			
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FOREIGN PATENT DOCUMENTS

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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
A		WO 92/16630	10-01-1992	Centraal Diergeneeskundig Instituut		
		WO 96/21465	07-18-1996	Connaught Laboratories Limited		
		WO 95/06732	03-09-1995	Rockefeller University		
		WO 95/31548	11-23-1995	UAB Research Foundation		
		EP 0 750 043 B1	12-27-1996	Societe Des Produits Nesle	No translation	
A		WO 02/038597 A2	05-16-2002	IL-Lelystad, Instituut Voor Dierhouderijen Diergezondheid B.V.		
		WO 00/05378	02-03-2000	Stichting Dienst Landbouwkundig Onderzoek		
		WO 02/061070 A2	08-08-2002	IL-Lelystad, Instituut Voor Dierhouderijen Diergezondheid B.V.		

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Sheet 2 of 3

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JD		ALLGAIER et al., Relatedness of Streptococcus suis isolates of various serotypes and clinical backgrounds as evaluated by macrorestriction analysis and expression of potential virulence traits. Journal of Clinical Microbiology, 2001, pp. 445-453, Vol. 39, No. 2.	
JD		BUSQUE et al., Immunization of pigs against Streptococcus suis serotype 2 infection using a live avirulent strain, Can J Vet Res., October 1997, pp. 275-79, Vol. 61, No. 4.	
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JD		DATABASE EMBL 'Online' McNab, S. gordonii partial aldB gene, cshA gene & fbpA gene, Database accession No. X65164, XP002213089.	
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JD		DE GREEFF et al., Distribution of Environmentally Regulated Genes of Streptococcus suis Serotype 2 among S. suis Serotypes and Other Organisms, Journal of Clinical Microbiology, Sept. 2002, pp. 3261-68, Vol. 40, No. 9.	
JD		ELLIOTT et al., Streptococcal infection in young pigs. V. An immunogenic polysaccharide from Streptococcus suis type 2 with particular reference to vaccination against streptococcal meningitis in pigs, October 1980, pp. 275-85, Vol. 85, No. 2.	
JD		KAWABATA et al., Molecular cloning, sequence and characterization of a novel streptococcal phosphoglycerate dehydrogenase gene, Oral Microbiology and Immunology, 2000, pp. 58-62, Vol. 15.	
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JD		McNAB, Cloning and sequence analysis of thymidine kinase from the oral bacterium Streptococcus gordonii, FEMS Microbiology Letters, 1996, pp. 103-110, Vol. 135.	
JD		MUNOZ et al., Characterization of IS1515, a Functional Insertion Sequence in Streptococcus pneumoniae, Journal of Bacteriology, Mar. 1998, pp. 1381-88, Vol. 180, No. 6.	
JD		QUESSY et al., Immunization of mice against Streptococcus suis serotype 2 infections using a live avirulent strain, Can J. Vet Res., October 1994, pp. 299-301, Vol. 58, No. 4.	

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Sheet	3	of	3

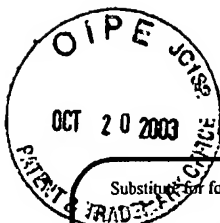
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		PCT International Search Report, PCT/NL02/00073, dated February 5, 2003.	
		PCT International Preliminary Examination Report, PCT/NL02/00073, dated May 7, 2003.	
		SEGBERS et al., Characterisation of the gene encoding sulfolysin from Streptococcus suis and expression in field strains, FEMS Microbiology Letters, 1998, pp. 255-61, Vol. 167.	
		SMITH et al., Environmentally regulated genes of Streptococcus suis: identification by the use of iron-restricted conditions in vitro and by experimental infections of piglets, Microbiology, 2001, pp. 271-80, Vol. 147.	
		SMITH et al., Identification and characterization of the cps locus of Streptococcus suis serotype 2: the capsule protects against phagocytosis and is an important virulence factor, Infect Immun., April 1999, pp. 1750-56, Vol. 67, No. 4.	
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		SMITH et al., Mutants of Streptococcus suis Types 1 and 2 Impaired in Expression of Muramidase-Released Protein and Extracellular Protein Induce Disease in Newborn Germfree Pigs, Infection and Immunity, Oct. 1996, pp. 4409-12, Vol. 64, No. 10.	

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
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Sheet 1 of 1

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First Named Inventor	Hilda E. Smith
Group Art Unit	To be assigned 1645
Examiner Name	To be assigned J. Nines
Attorney Docket Number	2183-605511S

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

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 ↓	✓	ELLIOTT et al., Streptococcal infection in young pigs. V. An immunogenic polysaccharide from Streptococcus suis type 2 with particular reference to vaccination against streptococcal meningitis in pigs, October 1980, pp. 275-85, Vol. 85, No. 2.	
		ROBERTS et al., The biochemistry and genetics of capsular polysaccharide production in bacteria, Ann. Rev. Microbiol., 1996, pp. 285-315, Vol. 50.	
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		WATSON et al., Pneumococcal Virulence Factors and Host Immune Responses to Them, European Journal of Clinical Microbiology & Infectious Diseases, June 1995, pp. 479-90, Vol. 14, No. 6.	

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